



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 26 2014

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

David M. Hudak, General Manager
Ultimate Ethanol, LLC
D/b/a/ POET Biorefining - Alexandria
13179 North 100 East
Alexandria, Indiana 46001

Re: Notice and Finding of Violation
POET Biorefining - Alexandria
Alexandria, Indiana

Dear Mr. Hudak:

The U.S. Environmental Protection Agency is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to Ultimate Ethanol, LLC, d/b/a POET Biorefining - Alexandria (POET-Alexandria or you) under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1). We find that you are violating the Indiana State Implementation Plan at your Alexandria, Indiana facility.

Section 113 of the Clean Air Act, 42 U.S.C. § 7413(a)(1), gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV/FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Manoj P. Patel. You may call him at (312) 353-3565 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,



George T. Czerniak
Director
Air and Radiation Division

Enclosure

cc: Phil Perry, Branch Chief
Office of Air Quality/Compliance & Enforcement Branch
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

**Ultimate Ethanol, LLC
d/b/a/ POET Biorefining – Alexandria
Alexandria, Indiana**

Proceedings Pursuant to
the Clean Air Act
42 U.S.C. § 7401 et seq.

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) **NOTICE OF VIOLATION and
FINDING OF VIOLATION**

) **EPA-5-14-IN-05**
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NOTICE AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation and Finding of Violation (NOV/FOV or Notice) under Section 113(a)(1) of the Clean Air Act (the Act), 42 U.S.C. § 7401. The authority to issue this NOV/FOV has been delegated to the Regional Administrator of EPA Region 5 and redelegated to the Director, Air and Radiation Division. EPA finds that POET-Alexandria is violating the Indiana State Implementation Plan (SIP), as follows:

Statutory and Regulatory Background

1. Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to EPA an operating permit program (Title V Permit Program). On December 4, 2001, 66 Fed. Reg. 62969, EPA granted Indiana final approval of its Title V Permit Program, effective November 30, 2001.
2. Section 502(a) of the Act, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b), provide that, after the effective date of any permit program approved or promulgated under Title V of the Act, no source subject to Title V may operate except in compliance with a Title V permit.
3. 40 C.F.R. § 70.3 provides that the requirements of Part 70 apply to any major source located in a state that has received whole or partial approval of its Title V program.
4. On February 20, 2008, 73 Fed. Reg. 9201-9203, EPA approved 326 IAC 8-5-6, fuel grade ethanol production at dry mills, to its volatile organic compounds (VOC) rules as a revision to the Indiana State Implementation Plan (SIP) at 40 C.F.R. § 52.770(c)(182).
5. 326 IAC 8-5-6(c)(1) states that the owner or operator of a fuel grade dry mill ethanol production plant shall install and operate a thermal oxidizer with an overall control

efficiency of not less than 98% percent or resulting in a VOC concentration of not more than 10 parts per million (ppm).

6. 326 IAC 8-5-6(e)(1) provides that the owner or operator of a fuel grade ethanol dry mill production plant that was constructed or modified after April 1, 2007, that installs and operates a thermal oxidizer as its VOC control device, shall measure the three (3) hour average operating temperature of the oxidizer using a continuous temperature monitor. The 3-hour average temperature must be greater than or equal to the minimum operating temperature established during the plant's most recent compliance demonstration.
7. 326 IAC 8-5-6(e)(2) provides the owner or operator of a fuel grade ethanol dry mill production plant that was constructed or modified after April 1, 2007, that installs and operates the wet scrubber as its VOC control device, shall monitor the flow rate at least once per day. The scrubber flow rate must be greater than the minimum flow rate established during the plant's most recent compliance demonstration.
8. On January 6, 2012, the Indiana Department of Environmental Management (IDEM) issued POET-Alexandria Title V Operating Permit No. T095-30443-00127. IDEM approved a significant permit modification to the Title V permit on January 23, 2013, and renumbered Title V Operating Permit as No. T095-31614-00127.
9. Part D.2.1(a) of the Title V Permit limits VOC emissions to 30.80 lbs/hour from scrubber CE008 and regenerative thermal oxidizer (RTO) CE009 unless operating under condition D.2.1(b) or D.2.1(c).
10. Part D.2.1(b) of the Title V permit limits VOC emissions when scrubber CE008 is not operating to 30.80 lbs/hour from the RTO CE009 which controls emissions from the fermenters and distillation processes, the DDGS dryers (EU025 and EU026), and from four centrifuges.
11. Part D.2.1(c) of the Title V permit limits VOC emissions when RTO CE009 is not operating to 75.95 lbs/hour from scrubber CE008 which controls emissions from the fermenter and distillation processes.
12. Part B.24 of the Title V permit and 40 C.F.R. § 52.12 provide that, for the purpose of establishing whether or not a person has violated or in violation of any provision or condition of a permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed.
13. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), authorizes the Administrator to initiate an enforcement action whenever, among other things, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of Title V of the Act, or any rule promulgated, issued or approved under Title V of the Act.

Factual Background

14. Ultimate Ethanol, LLC, d/b/a/ POET Biorefining--Alexandria (POET-Alexandria) owns and operates a fuel grade ethanol production dry mill facility at 13179 North 100 East, Alexandria, Indiana (the facility).
15. The facility includes: two (2) natural gas fired dried distillers grains with solubles dryers, identified as EU025 and EU026, with emissions venting to RTO CE009 and exhausting to stack SV009; one (1) fermentation process containing five (5) fermenters, identified as EU012 through EU016; one (1) yeast propagation tank, identified as EU017; one (1) beer well, identified as EU018, with emissions controlled by scrubber CE008 and RTO CE009, with emissions exhausting to SV009; one (1) distillation process containing one (1) beer stripper, identified as EU019, one (1) rectifier column, identified as EU020, one (1) side stripper, identified as EU021, one (1) set of three molecular sieves, identified as EU022, one (1) set of four (4) evaporators, identified as EU023, emissions are controlled by scrubber CE008 and RTO CE009, with emissions exhausting to SV009; one (1) set of four (4) centrifuges, identified as EU024, emissions controlled by RTO CE009, with emissions exhausting to SV009. During the RTO downtime, all emissions are exhausted to the RTO bypass stack SV008.
16. On December 20, 2013, EPA issued a Request for Information to the POET-Alexandria facility under Section 114 of the Act, 42 U.S.C. § 7414.
17. On February 27 and March 27, 2014, POET – Alexandria responded to EPA's Request for Information.
18. On October 14, 2008, RTO CE009 achieved the 3-hour average temperature of 1655 °F during a compliance stack test.
19. On April 13, 2010, Scrubber CE008 achieved the average minimum flow rate of 66 gallons per minute (GPM) during a compliance stack test.
20. On April 14, 2010, RTO CE009 achieved the 3-hour average temperature of 1670 °F during a compliance stack test.
21. POET – Alexandria performed several stack tests on its RTO CE009 and scrubber CE008 from April 17 through June 26, 2012.
22. On June 28, 2012, RTO CE009 achieved the 3-hour average temperature of 1742 °F during a compliance stack test.
23. The April 17, 2012 stack test results indicated that at RTO CE009, the facility emitted 32.27 lbs VOC/hr. The test result also indicated that the facility had an overall VOC control efficiency of 97.63%, and demonstrated VOC concentration of 18.14 ppmv at RTO CE009.

24. The April 18, 2012 test results indicated that at RTO CE009, the facility emitted 31.53 lbs/hr. The test result also indicated that the facility had an overall VOC control efficiency of 96.47%, and demonstrated VOC concentration of 18.35 ppmv at RTO CE009.
25. The May 15, 2012 test results indicated that at RTO CE009, the facility emitted 43.42 lbs VOC/hr. The test result also indicated that the facility had an overall VOC control efficiency of 94.34%, and demonstrated VOC concentration of 32.63 ppmv at RTO CE009.
26. The May 16, 2012 test results indicated that at RTO CE009, the facility emitted 30.92 lbs VOC/hr. The test result also indicated that the facility had an overall VOC control efficiency of 95.59%, and demonstrated VOC concentration of 19.67 ppmv at RTO CE009.
27. The June 5, 2012 test results indicated that at RTO CE009, the facility emitted 35.29 lbs VOC/hr. The test result also indicated that the facility had an overall VOC control efficiency of 95.91%, and demonstrated VOC concentration of 57.03 ppmv at RTO CE009.
28. The June 6, 2012 test results indicated that at RTO CE009, the facility had an overall VOC control efficiency of 97.23% and demonstrated a VOC concentration of 19.38 ppmv.
29. The June 26, 2012 test results indicated that at RTO CE009, the facility had an overall VOC control efficiency of 97.88% and demonstrated a VOC concentration of 25.17 ppmv.
30. POET-Alexandria submitted combustion chamber temperature records for RTO CE009.
31. POET-Alexandria submitted feed water flow rate records for Scrubber CE008.

Violations

32. The April 17, 2012, April 18, 2012, May 15, 2012, May 16, 2012, and June 5, 2012, stack test results demonstrate that at RTO CE009, the facility emitted VOCs in excess of the permitted limit of 30.80 lbs/hr as required by Title V Permit No. 095-31614-00127, Emission Limit D.2.1(a), which constitutes a violation of the Indiana SIP, Section 502(a) of the Act, 42 U.S.C. § 7661(a), and 40 C.F.R. § 70.7(b).
33. The April 17, 2012, April 18, 2012, May 15, 2012, May 16, 2012, June 5, 2012, June 6, 2012, and June 26, 2012, stack test results demonstrate that at RTO CE009, the facility did not achieve a VOC control efficiency of 98%, as required by Title V Permit No. 095-31614-00127, Emission Limit D.2.2, which constitutes violation of the Indiana SIP, Section 502(a) of the Act, 42 U.S.C. § 7661(a), and 40 C.F.R. § 70.7(b).

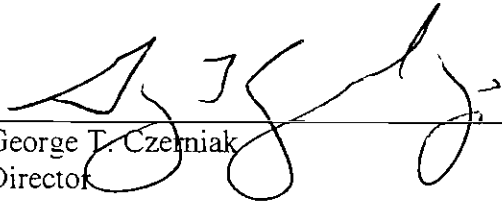
34. The April 17, 2012, April 18, 2012, May 15, 2012, May 16, 2012, June 5, 2012, June 6, 2012, and June 26, 2012, stack test results demonstrate that at RTO CE009, the facility exceeded a VOC concentration of 10 ppmv as required by Title V Permit No. 095-31614-00127, Emission Limit D.2.2, which constitutes violation of the Indiana SIP, Section 502(a) of the Act, 42 U.S.C. § 7661(a), and 40 C.F.R. § 70.7(b).
35. From July 1, 2009 through September 24, 2013, POET-Alexandria operated RTO CE009 below the required 3-hour average temperature as specified in Title V Permit No. 095-31614-00127, Emission Limit of D.2.9, which constitutes a violation of the Indiana SIP, Section 502(a) of the Act, 42 U.S.C. § 7661(a), and 40 C.F.R. § 70.7(b).
36. From April 13, 2010 through December 31, 2013, POET-Alexandria operated Scrubber CE008 below the required minimum feed water flow rate as specified in Title V Permit No. 095-31614-00127, Emission Limit of D.2.11, which constitutes a violation of the Indiana SIP, Section 502(a) of the Act, 42 U.S.C. § 7661(a), and 40 C.F.R. § 70.7(b).

Environmental Impact of Violations

37. VOC pollution causes a variety of health and environmental impacts, such as acid rain, global warming, water quality deterioration, and visual impairment. VOC plays a major role in the atmospheric reactions that produce ozone. Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground level ozone also can reduce lung function and inflame lung tissue. Repeated exposure may permanently scar lung tissue.

Date

6/26/17


George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

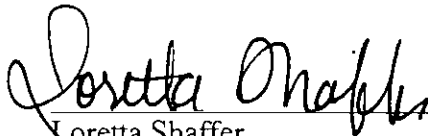
I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-14-IN-05, by Certified Mail, Return Receipt Requested, to:

David M. Hudak, General Manager
Ultimate Ethanol, LLC
d/b/a/ POET Biorefining – Alexandria
13179 North 100 East
Alexandria, Indiana 46001

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first-class mail to:

Phil Perry, Chief
Compliance and Enforcement Branch
Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, Room IGCN 1003
Indianapolis, Indiana 46206-6015

On the 27 day of June 2014.



Loretta Shaffer
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0006 01859952